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10/519,846	01/13/2005	Sung Yoon Kim	260977US6PCT	7194
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EXAMINER SCHWARTZ, DARREN B				
ART UNIT 2435		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/519,846

Applicant(s)

KIM ET AL.

Examiner

DARREN SCHWARTZ

Art Unit

2435

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant amends claims 1-20, added claims 23-25 in the amendment filed 07/11/08.

Response to Arguments

Applicant's arguments with respect to claims 1-20 and 23-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3, 13-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "read key" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "key information for decrypting the encrypted content to the group identifier and for registering the grouped device identification information and the key information." This limitation appears to be incomprehensible and renders the claim indefinite as to what applicant regards as their invention as to how "key information for decrypting the encrypted content to the group identifier and for registering the grouped device identification information and the key information."

Claim 15 recites the limitation "means for extracting refuses a device registration request." This limitation appears to be incomprehensible and renders the claim indefinite as to what applicant regards as their invention.

Claim 19 recites the limitation "an information device configured as a client of the information server." This limitation appears to be incomprehensible and renders the claim indefinite as to what applicant regards as their invention.

Any claim not specifically addressed above is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4-9, 12-14, 16 and 18-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bel et al (U.S. Pat Pub 2002/0174354 A1), hereinafter referred to as Bel.

Re claim 1: Bel teaches an information device, comprising:

means for storing an encrypted content whose use requires a license (¶¶33; ¶¶37);

means for storing the license (¶¶35; ¶¶37);

means for storing user data including (a) grouped device identification information for grouping and identifying a plurality of information devices that includes the information device and whose information devices are configured to decrypt the encrypted content (¶¶40, lines 14-20; ¶¶45; Fig 4, elts 402; ¶¶53) and

(b) key information for decrypting the encrypted content and which is commonly provided to a device group configured to include the plurality of the information devices (¶¶54), and

(c) a group identifier provided to the device group, wherein the means for storing the user data stores the grouped device identification information and the key information together with the group identifier (Fig 4: elts 310, 402 & 403; ¶40; ¶54); and

means for performing a process of decrypting the encrypted content, based on the license and the user data (Abstract).

Re claim 4: Bel teaches means for requesting an information server to register the device group in the information server (¶53-¶54).

Re claim 5: Bel teaches means for requesting the information server to register the information device as an object configured to be serviced (¶53-¶54), and to submit the grouped device identification information and the key information to the information device (¶53-¶54; ¶56).

Re claim 6: Bel teaches means for storing unique device identification information for identifying the information device from other information devices similar to the information device (Fig 4, elt 403: ¶54; Note the following: device identifiers UID1, ... , UID9); and

means for requesting the information server to register in the information server the unique, device identification information stored in the means for storing the unique device identification information in the information server (¶54).

Re claim 7: Bel teaches means for producing the unique device identification information (¶54).

Re claim 8: Bel teaches a device registration deletion request means for requesting the information server to delete the registration of the registered unique device identification information in the information server (¶55).

Re claim 9: Bel teaches the means for storing the user data stores the group identifier, which is provided to the device group, which is a group that includes a plurality of information devices owned by one user (§§6; §9).

Re claim 12: Bel teaches the means for storing the content stores the encrypted content, which includes at least one of text data, still image data, moving image data, or voice data (§13).

Re claim 13: Bel teaches an information server configured to enable an encrypted content to be used, the information server comprising:

means for associating information about a device group to which an information device configured to decrypt the encrypted content belongs (§§51; §54) and

a group identifier and registering the information according to a group registration request from the information device (§54),

the device group configured to include a plurality of information devices (§12; §16); and

means for registering the information device as an object configured to be serviced according to a service registration request from the information device, for associating grouped device identification information an identifies a plurality of the information devices (Figure 4, elts 310, 402 & 403; §54), and

key information for decrypting the encrypted content to the group identifier and for registering the grouped device identification information and the key information (§45; §47-§48), and for providing the grouped device identification information and the key information to all information devices in the device group (§40).

Re claim 14: Bel teaches means for extracting device identification information that identifies the information device from a device registration request from the information device, for associating

the device identification information with the group identifier and for registering the device identification information according to the device registration request (§54).

Re claim 16: Bel teaches the means for extracting deletes the device identification information, which is specified by a device registration deletion request from the information device (§55).

Re claim 18: Bel teaches the means for associating associates information about the device group which is a group that includes a plurality of information devices owned by one user (§6; §9).

Re claim 19: Bel teaches an information processing system comprising:

an information server configured to enable an encrypted content to be used (§16); and

an information device configured as a client of the information server and to receive a service from the information server through communication lines (Fig 1, elt 100; §28), wherein the information server comprising: includes

means for associating information about a device group to which the information device (§51; §54), which is configured to decrypt the encrypted content belongs and a group identifier and registering the information according to a group registration request from the information device (§54), the device group configured to include a plurality of information devices (§12; §16); and

means for registering the information device as an object configured to be serviced, according to a service registration request from the information device, for associating grouped device identification information that groups (Figure 4, elts 310, 402 & 403; §54) and identifies the plurality of the information devices and key information for decrypting the encrypted content to the group identifier and for registering the grouped device identification information and the key

information (§§45; ¶47-¶48), and for providing the grouped device identification information and the key information to all information devices in the device group (§40), and

the information device comprising: includes

means for storing the encrypted content (§33; ¶37);

means for storing a license (§35; ¶37);

means for storing user data that includes the grouped device identification information and the key information, which are provided from the information server, and the group identifier, the means for storing the user data storing the grouped device identification information and the key information together with the group identifier (Fig 4: elts 310, 402 & 403; ¶40; ¶45; ¶53-¶54); and

means for decrypting the encrypted content stored in the means for storing the content, based on the license and the user data (Abstract).

Re claim 20: Claim 20 is rejected under similar grounds as those provided by claim 1.

Re claim 23: Bel teaches:

a first memory configured to store an encrypted content whose use requires a license (§33; ¶37);

a second memory configured to store the license (§35; ¶37);

a third memory configured to store user data including (a) grouped device identification information for grouping and identifying a plurality of information devices that includes the information device, the information devices being configured to decrypt the encrypted content (§40, lines 14-20; ¶45; Fig 4, elts 402: ¶53), (b) key information for decrypting the encrypted content and which is commonly provided to a device group configured to include the plurality of the information devices (§54), and (c) a group identifier provided to the device group, wherein the third memory is

further configured to store the grouped device identification information and the key information together with the group identifier (Fig 4: elts 310, 402 & 403; ¶40; ¶54); and

a processor configured to perform a process of decrypting the encrypted content, based on the license and the user data (Abstract; ¶42).

Re claim 24: Claim 24 is rejected under similar grounds as those provided for claim 13.

Re claim 25: Bel teaches an information processing method for an information server, the method comprising:

associating a group identifier and information about a device group that includes an information device configured to decrypt encrypted content, according to a group registration request from the information device (¶51; ¶54), the device group configured to include a plurality of information devices (¶12; ¶16);

registering the information, according to the group registration request from the information device; registering the information device as an object configured to be serviced, according to a service registration request from the information device (Figure 4, elts 310, 402 & 403; ¶54);

associating the group identifier with grouped device identification information that groups and identifies the plurality of the information devices, and key information for decrypting the encrypted content; registering the grouped device identification information and the key information (¶45; ¶47-¶48); and

providing the grouped device identification information and the key information to all information devices in the device group (¶40).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 3, 10, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bel et al (U.S. Pat Pub 2002/0174354 A1), hereinafter referred to as Bel, in view of Tanaka et al (U.S. Pat Pub 2002/0114466 A1), hereinafter referred to as Tanaka.

Re claim 2: Bel teaches all the limitations of claim 1 as previously discussed.

Bel further teaches the means for storing the license stores the license, which includes the grouped device identification information (§9).

Tanaka teaches the means for storing the license stores the license, which includes the license identification information (§8) and the means for storing the content associates license identification information for identifying the license to the encrypted content to (§105).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Bel with the teachings of Tanaka, for the purpose of embedding group information and licensing identification into the license itself, as taught by Tanaka.

Re claim 3: The combination of Bel and Tanaka teaches:

the means for performing reads out the license identification information associated to the encrypted content, which is requested to be replayed from the memory means for storing the content (Tanaka: §7),

the means for performing reads out the grouped device identification information, which is associated with the read license identification information from the means for storing the license (Bel: ¶40),

the means for performing reads out the key information associated with the read grouped device identification information (Bel: Abstract; ¶10), and

the means for performing decrypts the encrypted content stored in the means for storing the content, using the read key information to output the content (Tanaka: ¶77; ¶108).

Re claim 10: Bel teaches all the limitations of claim 1 as previously discussed.

However, Tanaka teaches: the means for storing the user data stores the key information, which corresponds to a device node key allocated to the device group, which is a device node in a bottom layer among a plurality of node keys in a hierarchical tree structure, wherein each of the node keys is encrypted and corresponds to each a different node in the hierarchical tree structure: which branches off from a top layer to the bottom layer, the means for storing the content stores the encrypted content, which is multiply encrypted by each node key of the plurality of the node keys on a path in the hierarchical tree structure from the device node key to a root key, the root key being a node key in the top layer of the hierarchical tree structure, and the means for performing sequentially decrypts each node key on the path from the bottom layer to the top layer in the hierarchical tree structure, using the key information to obtain the root key, and then decrypts the encrypted content of by using the obtained root key (Figures 19, 20; ¶11; ¶176).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Bel with the teachings of Tanaka, for the purpose of providing a key encrypting key system for protecting multimedia content, as is well known in the art.

Re claim 11: The combination of Bel and Tanaka teaches means for storing the content stores the encrypted content which is encrypted by a content key that is encrypted by the root key, and the means for performing decrypts the content key by using the root key, and then decrypts the encrypted content of using the decrypted content key (Figures 19, 20; ¶11; ¶176).

Re claim 17: Bel teaches all the limitations of claim 13 as previously discussed.

Tanaka teaches: means for providing a license specified by a license request from an information device of the plurality of the information devices to the information device that requested the license and according to the license request (Abstract); and

means for extracting the grouped device identification information from the license request to judge whether the extracted grouped device identification information is registered by the means for registering (¶14-¶15), and, for determining whether to charge for providing the license from the means for providing, depending upon the judgment (¶74; ¶114).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Bel with the teachings of Tanaka, for the purpose of authenticating use of a license and charging for use of said license and content.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bel et al (U.S. Pat Pub 2002/0174354 A1), hereinafter referred to as Bel, in view of O'Neil (U.S. Pat Pub 2002/0085490 A1), hereinafter referred to as O'Neil.

Re claim 15: Bel teaches all the limitations of claim 14 as previously discussed.

However, O'Neil teaches after the number of device identification information registered in one device group reaches a predetermined number, the device registration management means for

extracting refuses a device registration request from a new information device belonging to the device group, after a number of information devices that correspond to device identification information that is registered in the device group reaches a predetermined number (¶¶6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Bel with the teachings of O'Neil, for the purpose of preventing too many devices from entering a group and degrading group communication performance.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARREN SCHWARTZ whose telephone number is (571)270-3850. The examiner can normally be reached on 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./
Examiner, Art Unit 2435
/Kimyen Vu/
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